Air Resources Board

Consumer Products and Architectural Coatings
Program Costs

Background

In 2003, the Legislature enacted AB 10X (Stats. 2003, Chapter 1X), which authorized the Air Resources Board (ARB or Board) to assess fees on manufacturers of consumer products and architectural coatings. AB 10X specifies that the fees on manufacturers are to be expended by the ARB solely to mitigate or reduce air pollution in the state created by consumer products and architectural coatings.

On June 6, 2003, the ARB staff proposed regulatory amendments to implement the provisions of AB 10X. Among other things, the amendments provide for the ARB Executive Officer to assess annual fees on manufacturers of consumer products and architectural coatings whose total sales will result in volatile organic compounds (VOC) emissions in California of 250 tons per year or greater. ARB staff also published an Initial Statement of Reasons (ISOR) explaining the rationale for the proposed amendments. Chapter IV of the ISOR includes a discussion of the resources that the ARB expends for the consumer products and architectural coatings programs. The program costs for consumer products and architectural coatings were calculated using an emissions-based approach (i.e., an approach based on the relative contribution of these sources to the stationary source emission inventory, with appropriate adjustments as described in the ISOR). Since emissions from consumer products and architectural coatings account for 19 percent of the adjusted stationary source emissions inventory, this emissions-based approach determined that consumer products and architectural coatings manufacturers could be assessed up to 19 percent of the total program costs for the ARB Stationary Source Program, or up to approximately $7.6 million for fiscal year 2003-2004.

After the ISOR analysis was released, some industry commenters expressed concern that this emissions-based approach may overstate the ARB's actual costs for the consumer products and architectural coatings programs. These commenters believe that a different approach should be used—one that identifies the cost of specific personnel and other resources devoted to these programs. In response to these concerns, on July 21, 2003, the ARB released an evaluation that used a different approach than the one used in the ISOR. This evaluation is entitled "Staff Preliminary Evaluation: Resources Expended for Consumer Products and Architectural Coating Programs" (preliminary evaluation), and is attached hereto as "Appendix B." The preliminary evaluation was based on resource estimates provided by the divisions at the ARB that work on these programs. The preliminary evaluation indicated that 67 ARB staff work on the consumer products and architectural coatings programs at an annual cost of $7.8 million. The $7.8 million estimate was based on the average salary

for ARB staff, preliminary information on other annual costs such as research contracts, and a 15.7 percent annual overhead cost.

After the preliminary evaluation was released, industry representatives requested ARB staff to provide more detail to substantiate the resource estimates contained in the preliminary evaluation. They suggested that the preliminary evaluation was not sufficiently detailed for them to analyze the accuracy of the information, that more data should be provided, and that the preliminary evaluation was based on informal "preliminary" resource estimates which should be verified with greater precision.

The Board responded by directing ARB staff to address these issues. Consequently, in this document the ARB has refined the preliminary evaluation by: (1) identifying by each ARB division the employment classifications of the 67 staff working on consumer products and architectural coatings; (2) determining the actual cost for each of the individual staff positions including annual salaries, benefits, and operating costs; (3) identifying other annual costs, by division, such as laboratory equipment maintenance contracts, laboratory supplies, laboratory facility leases, and other ongoing contracts; and (4) including the 15.7 percent annual overhead cost . This refined, more detailed analysis, shows that the annual cost of the consumer products and architectural coatings programs using this methodology is $8.9 million, an increase from the $7.8 million estimated in the preliminary evaluation. The $8.9 million cost includes $6.8 million for 67 ARB staff positions, and over $2 million for other program costs. Following is a detailed breakdown of the $8.9 million in program costs. Appendix A provides the detailed information.

Methodology and State Financial Operations

Budgeted resources for the consumer products and architectural coating programs include two cost components: 1) program costs; and 2) general and administrative overhead. "Program costs" are those that are specifically identifiable to the program, or are incurred for a common or joint purpose benefiting multiple programs and not directly assignable to but necessary for the primary program to function. "General and Administrative Overhead" consists of the costs of the policy and executive management of the ARB, i.e., the Chairman's Office and the Executive Office, and the Administrative Services function. Collectively, the departmental overhead function provides the policy and management direction and support for all programs of the ARB. Through cost allocation, overhead costs are proportionally distributed to programs based on their relative share of total costs.

The State's accounting structure segregates costs into three categories: personal services, operating expenses, and other costs.

- Personal Services is defined as compensation for State employees and consists of salary and employee benefits (FICA, Medicare, Retirement, and Health).

Salaries - Cost based on staff budgeted for the various functions necessary to implement and support the programs.

Employee Benefits - Cost based on budgeted factors established by respective authorities: for FICA and Medicare premiums, the federal government; for retirement contribution, the State Budget Act and Public Employees Retirement System; and for health insurance, the State Budget Act and Public Employees Retirement System.

- "Operating Expenses" consist of expenses related to employees including general expense, printing, communications, postage, training, travel in state, and facilities. The standard cost per position for these items is developed based on the past year average costs of the organizational units involved in the implementation and support of the programs.

  General Expense - includes office supplies and materials, office equipment maintenance and repair contracts, library subscriptions and reference documents, and various miscellaneous items.

  Printing - includes reproduction and publication costs of documents and reports

  Communications - includes telephones, service support, modem and data lines, and related supplies

  Postage - includes stamps, envelopes, and postage-related supplies and meters

  Training - includes cost of courses, professional conferences, tuition and registration fees

  Travel In State - includes employee per diem expenses, vehicle rentals, commercial air transportation, and other travel-related expenses

  Facilities - includes cost of leased office space, utilities, janitorial and grounds services, general maintenance and repair

- "Other Costs" are costs not directly related to employees but necessary for the implementation and support of the programs – laboratory costs including equipment and facilities, supplies, and specialized contracts.

As a state agency, the financial reporting structure of the ARB is designed primarily to meet statewide legal requirements as prescribed by the Department of Finance and the State Controller's Office. Like most State agencies, the ARB's accounting structure is not designed to capture expenditure information at the detailed, activity level of programs. To do this would require an individual time reporting system for all staff within the Board. The cost of such a system in dollars and staff time make this approach a prohibitively expensive administrative endeavor and an inefficient use of limited staff resources.

Nonetheless, program resources can in fact be identified based on estimates of costs by the responsible program managers who are relying on their experience and knowledge of the staff time spent to conduct the various activities. The costs for dedicated activities are directly identifiable to programs and are assigned accordingly. Resources supporting common or joint activities benefiting multiple programs are budgeted based on estimates of benefit/service to the individual impacted programs.

Program Activities and Costs

In the 2003-2004 fiscal year budget, the ARB is projected to expend $39.6 million on its stationary source program. The sources covered under this program include many diverse sources such as power plants and refineries, manufacturing facilities, gas stations, agricultural and prescribed burning, consumer products, and architectural coatings. A description of the ARB's activities related to the stationary source program budget is included in the Governor's Budget Summary (Governor, 2003a) and the Governor's Proposed 2003-2004 Budget (Governor, 2003b). The final Budget Act of 2003 (Stats. 2003, Chapter 157) authorized through an appropriation in the Air Pollution Control Fund, the depository for the fees, a total of $17.4 million in regulatory fees in partial support of the ARB Stationary Source Program. The $17.4 million represents an increase of $14.4 million in regulatory fees, as compared to the $3 million in fees assessed by the ARB in the 2002-2003 fiscal year.

Consumer Products and Architectural Coatings Programs

The ISOR discusses the resources expended for facilities. This section discusses the resources expended on the ARB's consumer products and architectural coatings programs.

The California Clean Air Act (CCAA) gave the ARB the authority to regulate consumer products in 1988. Since that time, the ARB has adopted and is implementing the following regulations to reduce the VOC emissions from consumer products: 1) antiperspirants and Deodorants (1989); 2) Consumer Products Phase I Amendments (1990); 3) Consumer Products Phase II Amendments (1991); 4) Alternative Control Plan (1994); 5) Midterm Measures Amendments I (1997); 6) Midterm Measures Amendments II (1999); 7) Aerosol Coatings (1995, 1998 and 2000); and 8) the Hairspray Credit Program (1997). The ARB is continuing to develop

regulations for consumer products to comply with the statutory mandate to achieve the maximum feasible reduction in VOC emissions from these sources.

Under California law, the primary authority for controlling emissions from architectural coatings is vested in the districts. However, the ARB often provides guidance and other assistance to the districts, including the development of model rules, such as the Suggested Control Measure (SCM) for architectural coatings. Widespread regulation of architectural coatings began in 1977, when the ARB approved a SCM for architectural coatings. A number of districts adopted architectural coatings rules based on this SCM and on revisions to the SCM in 1985 and 1989. Given advances in coatings technologies and the need for further emissions reductions to attain health-based air quality standards in many districts, the ARB, in cooperation with the districts, evaluated the VOC content limits in the 1989 SCM and updated the SCM in 2000.

Updating the SCM was a two-year effort and included the following activities: 1) a comprehensive survey of architectural coatings; 2) regular meetings with districts, United States Environmental Protection Agency (U.S. EPA), and industry representatives; 3) an evaluation of durability and performance testing in various coating categories; 4) an evaluation of U.S. EPA's national architectural coatings rule; 5) technical analyses of all the coating categories proposed in the SCM; 6) an evaluation of alternatives to the SCM in a final program environmental impact report (ARB, 2000c); and 7) an analysis of the cost impacts. ARB staff also conducted eight public workshops and meetings with individual manufacturers and other interested parties from May 1998 through March 2000.

In addition to these activities, the ARB staff performs a variety of other activities that are necessary to effectively control emissions from consumer products and architectural coatings. To effectively understand the contribution from these sources to California's air quality problems, ARB staff conducts extensive statewide monitoring of ambient ozone and particulate matter concentrations. In order to understand where the pollution comes from, ARB staff develops and maintains statewide emission inventories for all sources of air pollutants. The ARB also sponsors research on the reactivity of air pollutants and the atmospheric processes that contribute to ozone and particulate matter formation. The emission inventory and research results are then used in air quality modeling analyses to determine the emissions level necessary to attain the federal and State mandated air quality standards.

Several divisions of the ARB perform these and other activities to understand, regulate, and enforce rules for the pollution coming from consumer products and architectural coatings. These divisions include the Stationary Source, Monitoring and Laboratory, Enforcement, Research, and Planning and Technical Support Divisions. Collectively, these efforts are an integral and necessary part of mitigating and reducing the emissions from these products.

ARB Stationary Source Division: The Stationary Source Division (SSD) is responsible for: 1) conducting surveys to determine the VOC emissions from consumer products

and architectural coatings; 2) developing regulations to reduce the VOC emissions from consumer products, and SCMs to reduce the VOC emissions from architectural coatings; 3) developing new consumer products elements for the State Implementation Plan (SIP) for ozone; and 4) implementing statewide regulations for consumer products and implementing a statewide averaging program for architectural coatings. To implement the consumer products regulations, SSD staff: 1) performs technology assessments for upcoming standards; 2) issues product determinations; 3) reviews and approves innovative product exemptions; 4) reviews and approves alternative control plans; 5) reviews and approves variance applications; 6) develops and submits SIP amendments to the U.S. EPA for approval; and 7) works with the Enforcement Division (ED), Monitoring and Laboratory Division (MLD), and Office of Legal Affairs (OLA) to enforce the regulations. SSD staff also works with the Research Division staff to conduct reactivity research and other research related to VOC emissions, and to determine the potential impacts of exempting compounds from the VOC definitions for consumer products and architectural coatings.

To implement the 2000 SCM for architectural coatings, SSD staff: 1) assists districts to adopt the SCM (18 districts have adopted the SCM to date); 2) reviews and approves district rules and submits them to the U.S. EPA for approval; 3) performs technology assessments of upcoming standards; 4) reviews and approves statewide averaging plans for architectural coating rules; and 5) works with the ED, MLD, and the OLA to enforce the statewide averaging program. The ARB is currently implementing the statewide averaging provision in the 2000 SCM at the request of the districts. The ARB plans to update the 2000 SCM when we complete our evaluation of the feasibility of achieving further VOC reductions through mass-based or reactivity-based control strategies. This update is expected to be a major undertaking that will require considerable ARB resources.

ARB Enforcement Division: The Enforcement Division provides support to the consumer products and architectural coatings programs by: 1) collecting products for laboratory analysis to determine compliance with the consumer products regulations and the averaging provision of district architectural coatings rules; 2) writing advisories to interpret the regulations; 3) working with SSD on surveys and regulation development and implementation; and 4) working with ARB's legal office to issue notices of violation to manufacturers that do not comply with the consumer products regulations.

ARB Monitoring and Laboratory Division: The Monitoring and Laboratory Division provides support to the consumer products and architectural coatings programs by: 1) developing test methods to measure the VOC content of consumer products and architectural coatings, and to measure the reactivity of aerosol coatings; 2) testing consumer products to determine compliance with VOC limits; 3) testing aerosol coatings to determine compliance with reactivity limits; 4) testing architectural coatings to determine compliance with the averaging provision in district rules; and 5) working with SSD on regulation development. These efforts are in addition to MLD staff conducting ambient air monitoring to determine which areas of the State are

nonattainment for the State and federal ozone and particulate matter air quality standards**.**

ARB Planning and Technical Support Division: The Planning and Technical Support Division provides support to the consumer products and architectural coatings programs by: 1) maintaining and updating the emissions inventories for these sources for incorporation into the SIP (SIPs are air quality plans that are updated frequently to reflect the latest advances in science and control technologies and are required to show how nonattainment areas will attain ambient air quality standards); 2) determining the effectiveness of ozone and particulate matter attainment strategies for SIP development and implementation; and 3) conducting air quality modeling to determine the population exposure to ozone and particulate matter.